

AMENDMENTS TO THE CLAIMS

The following is a listing of claims that replaces all prior versions, and listings, of claims in the application. Underlining denotes added text. Strikethrough and double brackets denote cancelled text.

1. (Currently Amended) A recombinant expression vector comprising consisting of in operable combination i) a nucleic acid sequence of interest encoding Factor IX protein, ii) a human Factor IX promoter sequence, and iii) one or more age an age regulatory sequence consisting of one or more of sequences, wherein said age regulatory sequences consists of a portion of SEQ ID NO:3 defined by SEQ ID NO:93 or a portion of SEQ ID NO:93 comprising the sequence of SEQ ID NO:91 SEQ ID NO:3, SEQ ID NO:91, and SEQ ID NO:93 wherein said regulatory sequence is located 3'
2. (Currently Amended) A method of introducing a transgene into for expressing Factor IX protein in a cell, comprising:
  - a) providing:
    - i) an isolated mammalian cell,
    - ii) a nucleic acid sequence of interest encoding factor IX protein,
    - iii) a human Factor IX promoter sequence, and
    - iv) one or more age an age regulatory sequence consisting of one or more of sequences, wherein said age regulatory sequences consists of a portion of SEQ ID NO:3 defined by SEQ ID NO:93 or a portion of SEQ ID NO:93 comprising the sequence of SEQ ID NO:91 SEQ ID NO:3, SEQ ID NO:91, and SEQ ID NO:93 wherein said age regulatory sequence is located 3'
  - b) operably linking said nucleic acid sequence encoding Factor IX protein, said promoter sequence, and said one or more age regulatory sequences sequence to produce a transgene; and

c) introducing said transgene into said cell to create a treated cell under conditions such that said nucleic acid sequence ~~of interest~~ encoding Factor IX protein is expressed in said treated cell.

3. (Currently Amended) A substantially purified age regulatory nucleic acid sequence comprising ~~at least a portion~~ consisting of SEQ ID NO:93.

4. (Currently Cancelled).

5. (Currently Amended) The ~~nucleic acid sequence recombinant expression vector~~ of Claim 1, wherein said age regulatory sequence ~~consists of~~ SEQ ID NO:93 ~~portion is selected from SEQ ID NO:91, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, and SEQ ID NO:144.~~

6. (Currently Amended) [[The]] A substantially purified nucleic acid sequence ~~of Claim 3, wherein said portion is~~ consisting of SEQ ID NO:91.

Claims 7-11 (Currently Cancelled).

12. (Currently Amended) The expression vector of Claim [[7]] 1, further comprising in operable combination an ~~age-related~~ age regulatory sequence ~~selected from~~ consisting of SEQ ID

NO:1 and portions thereof.

13. (Currently Amended) [[A]] An isolated mammalian host cell containing the recombinant expression vector of Claim [[7]] 1.

14. (Currently Cancelled).

15. (Currently Amended) The isolated mammalian host cell of Claim 13, wherein said host cell is a gamete.

Claims 16-20 (Currently Cancelled).

21. (Currently Amended) [[The]] A treated isolated mammalian cell produced by the method of Claim 2.

22. (New) The method of Claim 2, wherein said age regulatory sequence consists of SEQ ID NO:93.

23. (New) The method of Claim 2, wherein said age regulatory sequence further comprises in operable combination an age regulatory sequence consisting of SEQ ID NO:1.

24. (New) The age regulatory nucleic acid sequence of Claim 3, further comprising in operable combination an age regulatory sequence consisting of SEQ ID NO:1.

25. (New) The age regulatory nucleic acid sequence of Claim 6, further comprising in operable combination an age regulatory sequence consisting of SEQ ID NO:1.

26. (New) A substantially purified age regulatory nucleic acid sequence consisting of SEQ ID NO:3.

27. (New) The age regulatory nucleic acid sequence of Claim 26, further comprising in operable combination an age regulatory sequence consisting of SEQ ID NO:1.
28. (New) The host cell of Claim 13, wherein said recombinant expression vector further comprises in operable combination an age regulatory sequence consisting of SEQ ID NO:1.
29. (New) The treated cell of Claim 21, wherein said recombinant expression vector further comprises in operable combination an age regulatory sequence consisting of SEQ ID NO:1.
30. (New) The treated cell of Claim 21, said treated cell is a gamete.